**1-Port Number** of following applications have been identified using wire shark ( Snap shoot and traces have been attached)

1. TELNET – 23
2. HTTP -80
3. FTP – 21
4. DNS – 53
5. DHCP 67 , 68

**2-Connection oriented protocol**

1-Make a network connection, terminate and transfer data have been managed by this

2- Connection oriented protocol establish and manage network connection and also delivery of data

Example: TCP protocol manages the set of rules or guidelines for establishing the connection

**3-TCP connection HOSTs**

1. Sync (SYNCHRONIZING PACKETS)
2. SYNC ACK
3. ACK

**4- CONNECTION LESS PROTOCOL**

1. UDP is a connection less protocol
2. These packets are transported on network with out connection being established and they are not acknowledged that data packets being arrived or not at their destination]

**5-TCP IMPROVE PERFORMANCE**

Max DATA throughput rate < (MSS/RTT)\*(1 / sqrt(p))

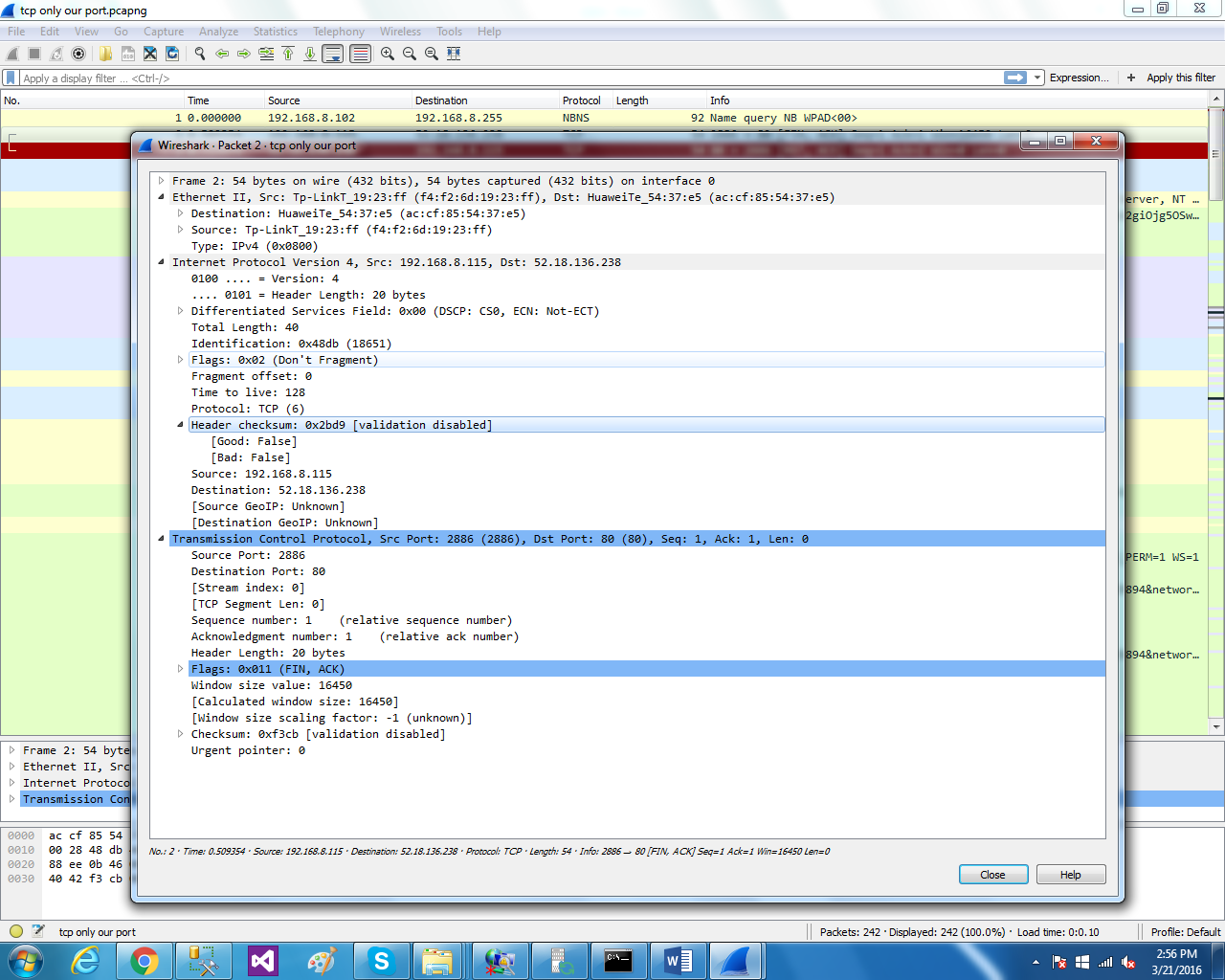
where:

* Max Rate: is the TCP transfer rate in bps
* MSS: is the maximum segment size (fixed for each Internet path, typically 1460 bytes) in bytes
* RTT: is the round trip time (as measured by TCP) in seconds (ping isn’t quite as good an RTT value)
* p: is the packet loss rate (fraction)

**6-FTP APP**

1. relies on client and server communication channels
2. ftp protocol is used to transfer the files over internet
3. It uses TCP transport service for reliability as ftp provides  navigating the directory structure and deleting files)
4. It was designed to allow the efficient transfer of files between any two devices on a TCP/IP internetwork

**7-TCP WINDOWS**

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